

Kylie R. Lin

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RESEARCH INTERESTS

Information Visualization, Human Cognition, Trust in Automated Systems, Research Methods.

EDUCATION

Atlanta, GA 2023 – Present	Georgia Institute of Technology Ph.D. in Human-Centered Computing Advisor: Cindy Xiong Bearfield GPA: 4.0 / 4.0
Evanston, IL 2019 – 2023	Northwestern University B.S. in Communication Studies & Cognitive Science Minor in Data Science Module in Digital Media Advisors: David Rapp, Steven Franconeri magna cum laude, SoC Dean's List (all eligible terms), Lambda Pi Eta Honor Society GPA: 3.98 / 4.0

RESEARCH EXPERIENCE

Atlanta, GA 2023 – Present	Georgia Institute of Technology Graduate Student Researcher VisualizaXiong Lab Advisor: Cindy Xiong Bearfield Studying how design choices impact people's perception of data visualizations and metrics to assess people's trust in automated systems.
Los Altos, CA Summer 2024	Toyota Research Institute Applied Behavioral Science Research Intern Human-Centered AI Team Advisor: Laura Libby Conducted research on vehicle owners' perceptions of electric vehicle battery degradation, identifying methods to mitigate misunderstanding.
Evanston, IL 2022 – 2023	Northwestern University Student Researcher Reading Comprehension Lab Advisor: David Rapp Conducted an honors thesis on the impact of visual complexity on people's comprehension of data visualizations and their confidence in their comprehension.
2020 – 2023	Research Assistant Visual Thinking Lab Advisor: Steven Franconeri Conducted research at the intersection of human cognition and data visualization. Co-authored a paper on chart alignment impacting human comparisons to IEEE TVCG.

Spring 2021	Research Assistant Social Media Lab Advisor: Jeremy Birnholtz Developed a codebook for qualitative survey data using data-driven open coding for a project on how young people disclose sensitive health information online.
Summer 2022	SiriusXM User Experience Research Intern Automotive Experience Design Team Manager: Katie Bessière Developed a framework for competitive benchmarking research. Successfully executed benchmarking studies: Handled the recruitment and live interviewing of 12 participants via UserTesting software.

PUBLICATIONS

CONFERENCE PUBLICATIONS

Lin, K., Stokes, C. & Xiong Bearfield, C. (2025). Write, Rank, or Rate: Comparing Methods for Studying Visualization Affordances. *IEEE Transactions on Visualization and Computer Graphics*.

Lin, K., Li, J., Sparks, J., Filipowicz, A., Shamma, D. & Libby, L. (2025). SOH Illusion: Misunderstandings of EV Battery State of Health and Methods to Promote Understanding. *Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*.

 **Best Paper Honorable Mention (Top 10%)**

Lin, K., Ru, S. S., Rapp, D. N., Guan, H. & Xiong Bearfield, C. (2025). What Makes a Visualization Visually Complex? In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*.

Lin, K., Stokes, C. & Xiong Bearfield, C. (2025). LLMs Are Not Reliable Human Proxies to Study Affordances in Data Visualizations. *2nd HEAL Workshop at CHI Conference on Human Factors in Computing Systems (HEAL @ CHI 2025)*.

Xiong, C., Setlur, V., Bach, B., **Lin, K.**, Koh, E., Franconeri, S. (2021). Visual Arrangements of Bar Charts Influence Comparisons in Viewer Takeaways. *IEEE Transactions on Visualization and Computer Graphics*.

JOURNAL PUBLICATIONS

Wang, H. W., Cohen, A., Nobre, C., **Lin, K.**, Zwald, Z., Kennedy, R., & Xiong Bearfield, C. [In Submission] Do You “Trust” This Visualization? An Inventory to Measure Trust in Visualizations. *IEEE Transactions on Visualization and Computer Graphics*.

POSTERS

Lin, K., Ru, S., Rapp, D., Guan, H., Bearfield, C. X. (2024). What Makes a Visualization Complex? Exploring Design Features Related to Visual Complexity. [Poster session]. *IEEE Visualization and Visual Analytics Conference*.

Lin, K., Rapp, D., Xiong, C. (2023). Does Visual Complexity Impact Reader Comprehension and Confidence of Data Visualizations? [Poster session]. *Psychonomic Society*.

Awad, M. F., **Lin, K.**, & Franconeri, S. L. (2023). Mixed Graph Designs Do Not Improve Visual Memory. *Journal of Vision*, 23(9), 5781-5781.

Lin, K., Rapp, D., Xiong, C. (2023). The Effect of Visual Complexity on Confidence and Comprehension in Visualization Experiences. [Poster session]. *Northwestern Cog Sci Fest*.

Awad, M., **Lin, K.**, & Franconeri, S. (2022). Does using a diversity of graph types help your audience remember your data?. *Journal of Vision*, 22(14), 4279-4279.

Lin, K., Xiong, C., Rapp, D. (2022). Attempts to Augment Refutation Text Benefits with Visualizations. [Poster session]. *Northwestern Undergraduate Research & Arts Exposition*.

Lin, K., Awad, M.F., Franconeri, S. (2022). The Effects of Visual Diversity in Series of Charts. [Poster session]. *Northwestern Cog Sci Fest*.

INVITED TALKS

Atlanta, GA May 2025	Conceptualizing Visual Complexity and Trust in Data Visualizations <i>CODA AI Synapse, Atlanta, Georgia, USA</i> (hosted by Jitesh Jain)
Schloss Dagstul Oct. 2024	Quantifying Perceptions of Visual Complexity with Data Visualization Design Features <i>Artificial and Human Intelligence, Schloss Dagstul, Germany</i> (hosted by Mehul Bhatt)

FELLOWSHIPS & AWARDS

2025	Best Paper Honorable Mention (ACM AutoUI 2025)
2023	Northwestern Communication Studies Excellence Award for Undergraduate Students
2022	MinneAnalytics Scholarship (\$500)
2021	2nd Place, Women in Data Science Datathon, Chicago
2021	Northwestern Cognitive Science Summer Undergraduate Research Fellowship (\$3500)
2021	Northwestern OUR Summer Undergraduate Research Grant (\$3500, awarded but declined)
2020	1st Place, Northwestern Data Visualization Contest <i>Interactive global map depicting the number of COVID-19 cases over time using RShiny.</i> <i>Submission published to university archives, see here.</i>
2020	Finalist, McCormick Design-a-Thon <i>Conducted market research and created a wireframe for an app promoting safe social interactions for university students in the time of COVID-19.</i>
2019	Clara Tao Memorial Scholarship (\$1000)
2017	National Merit Commended Scholar

INTERNATIONAL VISITING & DEVELOPMENT

Schloss Dagstuhl **Training Forum on Artificial and Human Intelligence**
Fall 2024 Host: Mehul Bhatt
 Presented an in-progress research project on using visualization design features to model perceived visual complexity in visualizations.

ACADEMIC SERVICES

CONFERENCE REVIEWER

2025 ACM Conference on Human Factors in Computing Systems (CHI)
2024 ACM Conference on Human Factors in Computing Systems (CHI)
2021 ACM Creativity and Cognition

TEACHING EXPERIENCE

Teaching Assistant

Fall 2025 Principles of Data Visualization (GATech)
Spring 2023 Data Science Project (NU)
2022 – 2023 Data Visualization (NU)
Winter 2021 Persuasive Images: Rhetoric in Popular Culture (NU)

Peer Mentor

Fall 2021 Communication & Technology (NU)

ADDITIONAL PROFESSIONAL EXPERIENCE

Belmont, CA **Just One Cookbook**
2021 – 2022 **Operations Analyst**
 Managers: Shen Chen, Namiko Chen
 Co-coordinated the launch of an online subscription membership program (JOC Plus) by designing site pages, advertisements, and by helping facilitate a soft launch.

2020 – 2021 **Digital Media Intern**
 Conducted research on global site traffic using R/RStudio and Google Search Console.

Evanston, IL **North by Northwestern**
2020 – 2021 **Graphics Editor & Social Media Graphics Coordinator**
 Taught weekly design lessons covering design principles, Adobe CC basics, accessibility design, 3D graphics, and more to undergraduate students.

Remote Summer 2020	Paravane Ventures Market Research & Strategy Case Analyst
Evanston, IL Summer 2018	Analyzed the UX/UI and website of the company Product Alliance and the online market for product management courses.

Northwestern-Medill Journalism Institute Student Journalist
Residency for U.S. and international students. Included writing, video production, ethics, and digital media.

RELEVANT COURSEWORK

Georgia Institute of Technology

Human-Computer Interaction
 Principles of Data Visualization (CS 6730)
 Information Visualization (CS 7450)
 Human-Centered Data Analysis (CS 7451)
 Prototyping Interactive Systems (CS 6452)

Social Computing
 Design of Online Communities (CS 6470)

Northwestern University

Data Science & Visualization
 Data Science I-III (STAT 301-1, 301-2, 301-3)
 Data Visualization (STAT 302)
 Information Visualization (COMM ST 395)

Programming
 Fundamentals of Computer Programming I-II (CS 111, 211)
 Introduction to Artificial Intelligence (CS 348)
 Introduction to Cognitive Modeling (COG SCI 207)

Research Methods

Evaluating Evidence (COG SCI 202)
 Cognitive Science Proseminar (COG SCI 366)
 Research Seminar (COMM ST 394)
 Presenting Ideas and Data (COG SCI 345)

SELECT SKILLS

HUMAN-SUBJECTS RESEARCH

Survey studies: Qualtrics, Prolific, Amazon Mechanical Turk
 Eye tracking studies: EyeLink 1000 eye tracker

Qualitative data analysis
 Thematic analysis
 data-driven open coding
 semi-structured interviewing

Quantitative data analysis
 R/RStudio/RShiny
 Python (pandas, sci-kit learn, Jupyter Notebooks)

PROGRAMMING

Python	Arduino	Processing
HTML/CSS	C/C++	Javascript

Data Visualization Libraries/Tools

D3.js	Tableau
matplotlib, seaborn	PowerBI
ggplot2	

DESIGN

Adobe Creative Suite: Photoshop, Illustrator, Premiere, After Effects, Dimension, XD

Microsoft 365: Excel, Powerpoint, Word

Google Workspace: Drive, Sheets, Docs, Slides, Colab

Figma, Miro